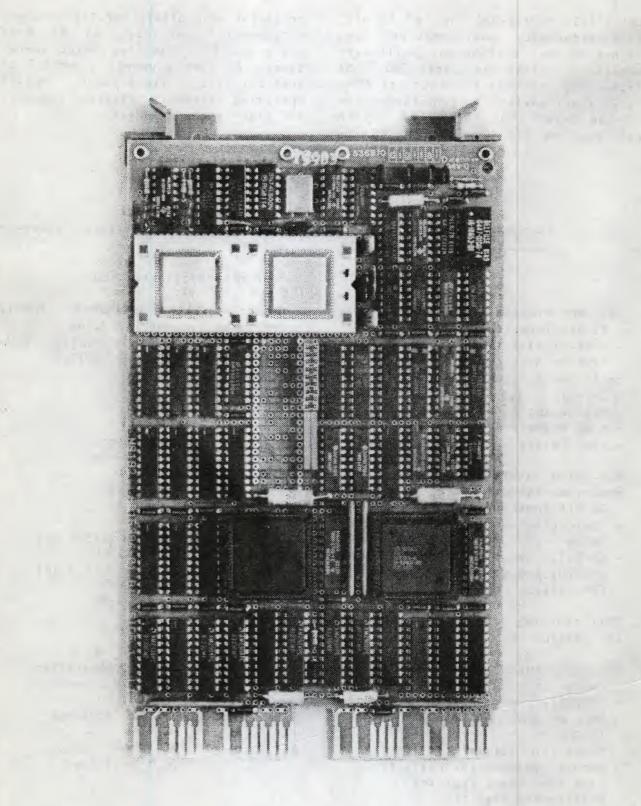
# ANNOUNCING DIGITAL'S NEW QBUS PRODUCTS





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LSI-11/73 (KDJ11-AA) HIGH PERFORMANCE MICROCOMPUTER

LSI-11/73 (KDJ11-AA) is a 16-bit, high-performance microcomputer contained on one dual-height multilayer module. Utilizing the latest CMOS/VLSI technology, the LSI-11/73 brings PDP-11/70 functionality to a microcomputer on the Q-Bus. The LSI-11/73, which utilizes the J11 (DCJ11) CMOS micro-

processor chip offers PDP-11/70 memory management capability, an 8k byte cache and FP11 floating point operations. It also supports a choice of sophisticated, field-proven PDP-11 operating systems, layered products and high-level languages.

#### FEATURES INCLUDE:

- . J11 CMOS microprocessor with:
  - 32-bit internal data path
  - Pipe-lined architecture
  - Four to five times LSI-11/23 KEF11 performance
  - On-ship full PDP-11 memory management
  - 4 MB addressing
  - Four levels of hardware interrupt
- PDP-11/70, PDP-11/44 compatible memory management with:
  - 22-bit physical address generation
  - Instruction and data (I/D) address space
  - Kernel, supervisor, and user (K/S/U) processor modes
  - Four status registers
- FP11 floating point instruction set (46 instructions)
- . PDP-11/70 system registers
  - Cache control register
  - Hit/Miss register
  - Program interrupt request register (PIRQ)
  - CPU error register
  - Memory system error register
  - Line time clock register
  - Maintenance register
- . An 8 KB cache
- · Q-BUS compatible (16, 18 or 22 bits)
- . Multi-level interrupt support
- . Optional wake-up circuit

- Four jumper selectable power-up options
- . Four microdiagnostic LEDs
- Supports all standard PDP-11 operating systems including
  - MicroPower/Pascal, RT-11, RSX-11M,S, RSX-11M PLUS, RSTS/E,
  - V7M-11 (UNIX \*).

### Specifications

Physical characteristics

Height 13.2 cm (5.2 in)

Width 22.7 cm (8.9 in)

Size Dual-height

### Power requirements/operation

Operational power +5v 4.0A max

Bus loads AC 2 unit loads DC 1 unit load

### Operating environment

Temperature 5 to 60 deg. C.

\*) UNIX is a trademark of Bell Labs.

#### MULTIPLEXOR DISTRIBUTION PANELS

MDB-H317-AC-X



EIA/20 ma current loop 8 channel distribution panel. RETMA rack mountable. Used with MLSI-DZ11-B multiplexor boards to allow user choice of 8 channels of EIA-RS-232-C or 20 ma current loop circuitry on a per line basis. Strappable for either active or passive current loop mode on a per line basis. Distribution panel has self contained power supply on rear with 6 foot AC cord. Does not require any power from CPU chassis.

MDB-H317-A/422-X



RS-232-C/RS-422 8 channel distribution panel. RETMA rack mountable. Used with MLSI-DZ11-B multiplexor boards to allow user choice of 8 channels of EIA-RS-232-C or RS-422 circuitry on a per line basis. When used with DZ11-B, provides the capability to transmit and receive data via RS-422 circuitry, thereby allowing placement of terminals with corresponding circuitry up to 3000 feet (914m) from the computer. Distribution panel has self contained power supply with 6 foot AC cord. Does not require any power from CPU chassis. Access to RS-422 circuitry is by use of eight 37 pin male connectors with pin numbers as described in EIA-RS-449 for Transmit, Receive, Carrier Detect, Ring, and Data Terminal Ready circuits.

Procedure is to indicate either X = 0 for 110 VAC, 60Hz operation or X = 2 for 220 VAC, 50Hz operation.

MDB-H317-E

**EIA-RS-232 16 channel distribution panel.** RETMA rack mountable. Used with one or two MLSI-DZ11-B multiplexor boards to provide DZ11-A or DZ11-E capabilities.

Base dimensions of all distribution panels are shown below.

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 Height
 Width
 Depth\*
 Weight

 5.25" (13.34cm)
 19.00" (48.26cm)
 4.50" (13.76cm)
 11 lbs. (5.0kg)

\*Built in power supply adds 2" depth to panel.

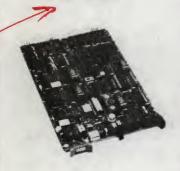
**NOTE:** The above Distribution Panels can be used with **DLV11-J** modules when connected by a unique Multiport Cable described below. This allows easier and neater connection of cables to terminals.

MLSI-BC11-8-10

**Multiport Cable** which connects MDB manufactured H-317 type distribution panels to one or two **DLV11-Js**. Cable is 10 feet (3.05m) long, one end of which has a Berg type 50-pin connector. The other end of cable has 8 connectors which plug into the I/O connectors of DLV11-J type modules.

#### SYSTEMS MODULES

MLSI-SCM11



Systems Communication Module that contains one asynchronous RS-232/20 ma current loop interface, bootstrap accommodations, and programmable Line Time Clock, which provides Unibus KW11-L compatibility with four level interrrupt capability. Switch selectable data rates from 110 to 38.4K baud are changeable from front edge of module without powering system down and removing board. Limited modem control. All UART parameters (word length, parity odd-even-none, and Stop Bits 1, 1.5 or 2) are wirewrap jumper selectable. Configured when shipped to transmit/receive 1 start bit, 7 data bits, odd parity, 1 stop bit. Active or passive receiver and/or transmitter current loop capability. Bootstrap sockets accommodate optional MXV11-AC chip sets as well as 2732/2716 PROMs which can be used for customer generated boot or ROM. ROM can be selected in address ranges up to 22-bit addressing; maximum ROM capacity is 8KB. Two front mounted LEDs indicate whether the module is transmitting or receiving data. The programmable Line Time Clock offers the ability to enable/disable interrupts under program control. Serial line address and vector address are wirewrap jumper changeable; configured at factory to device address 777560g, vector address 060g which is DEC recommended address of console device. Utilizes optional BC05M-2C (Current Loop), BC05C-25, or MDB BC0TC Direct Connect (RS-232-C) cables.

Mounting Code

Dual Slot

Power Drawn 1.5a @ +5V .1a @ +12V **Bus Loads Drawn** 

1 max



